



Attorney Docket No.: KCX-1019  
(17,986)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application	)	Examiner: L. SALVATORE
EUGENIO VARANO ET AL.	)	
	)	Art Unit: 1771
Serial No.: 10/748,648	)	
	)	Deposit Account: 04-1403
Filed: December 30, 2003	)	
	)	Customer No.: 22827
Title: BIMODAL PORE SIZE NONWOVEN	)	
WEB AND WIPER	)	Confirmation No.: 6897

APPEAL BRIEF

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Applicants respectfully submit the enclosed Appeal Brief pursuant to 37 C.F.R. 41.37(c) and requests that the Examiner's final rejection of claims 1-4 and 6-23 be reversed and that the application be remanded to the Examiner for allowance.

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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First-class mail in an envelope addressed to the Assistant Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

Date: 4/5/05

Name:

Denise Bulkeley  
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**I. REAL PARTY IN INTEREST**

The assignee Kimberly-Clark Worldwide, Inc. is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

The Applicants, Applicants' legal representative, and assignee have no knowledge of other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**III. STATUS OF CLAIMS**

Claims 1-4 and 6-23 are pending, with claim 5 previously canceled. The Applicants appeal the final rejection of claims 1-4 and 6-23.

**IV. STATUS OF AMENDMENTS**

The Applicants did not amend the claims subsequent to the final rejection.

**V. SUMMARY OF CLAIMED SUBJECT MATER**

The present invention describes and claims a nonwoven web laminate (100 in Figure 1). Referring to independent claim 1, the nonwoven web laminate generally includes a first nonwoven web layer (102 in Figures 1-3) and a second nonwoven web layer (104 in Figures 1-3).

The mean equivalent pore radius of the first nonwoven web layer is greater than about 100 micrometers, as shown for examples 1-5 in Figure 3. The mean equivalent pore radius of the second nonwoven web is less than about 100 micrometers, as shown for the  $\leq 100$  micrometer example in Figure 3. The combination of the first nonwoven web layer with the second nonwoven web layer in the nonwoven web laminate results in an overall pore size distribution which is at least bimodal. As defined in paragraph

[0027] of the published application, "bimodal pore size distribution" means that there are at least two distinct pore size peaks in the pore size distribution for the overall laminate.

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claim 1 stands rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Patent Publication 2002/0134493 (Annable '493) in view of European Patent Publication 1091035 (Lampila '035).

## VII. ARGUMENT

- A. Claim 1 is patentable under 35 U.S.C. Section 103(a) over U.S. Patent Publication 2002/0134493 (Annable '493) in view of European Patent Publication 1091035 (Lampila '035).

The Applicants respectfully assert that the combination of Annable '493 and Lampila '035 does not teach each and every limitation recited in independent claim 1. Specifically, the Applicants respectfully assert that the combination of Annable '493 and Lampila '035 would not result in a laminate having a mean equivalent pore radius of greater than about 100 micrometers in the first nonwoven web layer, a mean equivalent pore radius of less than about 100 micrometers in the second nonwoven web, and an overall pore size distribution which is at least bimodal as recited in independent claim 1.

Annable '493 teaches a method for forming wiping products from a nonwoven web. The method includes microcreping a single or multilayered nonwoven web to improve functionality, *i.e.*, bulk, absorbency, etc., of the microcreped nonwoven web (Annable '493, para. [0029]). Although the nonwoven web may comprise microfibers having a diameter of about 0.5 micrometers to about 75 micrometers (Annable '493, para. [0023]), Annable '493 is silent as to the mean equivalent pore radius of the resulting microcreped wiper.

Lampila '035 similarly teaches microcreping a nonwoven web to improve liquid absorption and drying properties (Lampila '035, para. [0010]). The microcreping process changes the pore size distribution of the nonwoven web so that "at least 30% of the total pore volume is associated with pores having an effective radius of greater than 100 micrometers" and "at least 5% of the total pore volume is associated with pores having an effective radius of less than 70 micrometers" (Lampila '035, para. [0016]). However, Lampila '035 is silent as to the mean equivalent pore radius of the resulting microcreped wiper.

The obviousness rejection appears to be premised on applying the microcreping process of Lampila '035 to the multilayer nonwoven web of Annable '493. However, it is significant to point out that the microcreping process of Lampila '035 acts on the entire web structure of Annable '493 and does not discriminate between different layers within the web. Therefore, microcreping the multilayer nonwoven web taught by Annable '493 according to the microcreping process taught by Lampila '035 would simply result in a microcreped multilayer web having some pores with an effective radius of greater than 100 micrometers and other pores with an effective radius of less than 70 micrometers.

As such, the combination of Annable '493 with Lampila '035 fails to teach or suggest a mean equivalent pore radius of greater than about 100 micrometers in one layer of the nonwoven web and a mean equivalent pore radius of less than about 100 micrometers in the second layer of the nonwoven web. Moreover, the combination of Annable '493 with Lampila '035 completely fails to teach or suggest an overall pore size distribution which is at least bimodal in the resulting microcreped multilayer nonwoven web.

For at least this reason, the Applicants respectfully assert that the combination of Annable '493 with Lampila '035 does not constitute prima facie proof of obviousness of all of the limitations of independent claim 1. Therefore, claim 1 and dependent claims 2-4 and 6-23 are patentable over the cited combination of Annable '493 and Lampila '035.

**VIII. CLAIMS APPENDIX**

See attached listing of pending claims involved in this appeal.

**IX. EVIDENCE APPENDIX**

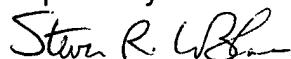
The Applicant does not rely on any evidence entered in this appeal.

**X. RELATED PROCEEDINGS APPENDIX**

The Applicant is not aware of any decision rendered by a court of the Board in any related appeals or interferences.

For at least the reasons discussed above, the Applicant respectfully submits that the final rejection of claims 1-4 and 6-23 should be reversed and that the application be remanded to the Examiner for allowance.

Respectfully submitted,



April 5, 2006

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## APPENDIX A – PENDING CLAIMS

The following is a listing of the claims involved in this appeal:

1. (Original) A nonwoven web laminate comprising a first nonwoven web layer comprising pores, and a second nonwoven web layer comprising pores, wherein the mean equivalent pore radius of the first nonwoven web layer is greater than about 100  $\mu\text{m}$ , and the mean equivalent pore radius of the second nonwoven web layer is less than about 100  $\mu\text{m}$  and the laminate has an overall pore size distribution which is at least bimodal.
2. (Original) The nonwoven web laminate of claim 1, wherein the first nonwoven web layer has a mean equivalent pore radius between about 100  $\mu\text{m}$  and about 600  $\mu\text{m}$ .
3. (Original) The nonwoven web laminate of claim 1, wherein the first nonwoven web layer comprises a creped nonwoven web, a nonwoven webs having fibers having a denier in excess of about 20  $\mu\text{m}$ , a nonwoven web comprising crimped fibers, or a nonwoven web having high bond-to-bond distances.
4. (Original) The nonwoven web laminate of claim 1, wherein the nonwoven web of the first layer comprises a spunbond nonwoven web or a bonded carded nonwoven web.
5. (Canceled)
6. (Previously Presented) The nonwoven web laminate of claim 4, wherein the nonwoven web of the first layer comprises crimped fibers.
7. (Previously Presented) The nonwoven web laminate of claim 4, wherein the nonwoven web of the first layer comprises a creped nonwoven web.

8. (Original) The nonwoven web laminate of claim 1, wherein the nonwoven web of the second layer has a mean equivalent pore radius between about 5  $\mu\text{m}$  and about 100  $\mu\text{m}$ .
9. (Original) The nonwoven web laminate of claim 1, wherein the nonwoven web of the second layer comprises a coform nonwoven web, an airlaid nonwoven webs, or a hydroentangled nonwoven web.
10. (Original) The nonwoven web laminate of claim 9, wherein the nonwoven web of the second layer comprises a coform nonwoven web.
11. (Original) The nonwoven web laminate of claim 1, further comprising a third nonwoven web layer, said third nonwoven web layer is adjacent to a side of the second nonwoven web layer which is opposite of a side of the second layer which is adjacent to the first layer, wherein the third layer has a mean equivalent pore radius greater than about 100  $\mu\text{m}$ .
12. (Previously Presented) The nonwoven web laminate of claim 11, wherein the third layer has a mean equivalent pore radius between about 100  $\mu\text{m}$  and about 600  $\mu\text{m}$ .
13. (Original) The nonwoven web laminate of claim 1, further comprising a third layer, said third layer is adjacent to a side of the first layer and which is opposite of a side of the first layer which is adjacent to the second layer, wherein the third layer has a mean equivalent pore radius less than about 100  $\mu\text{m}$ .
14. (Previously Presented) The nonwoven web laminate of claim 13, wherein the third layer has a mean equivalent pore radius between about 5  $\mu\text{m}$  and about 100  $\mu\text{m}$ .
15. (Original) The nonwoven web laminate of claim 13, wherein the nonwoven web of the first layer comprises a creped nonwoven web, a nonwoven web having fibers

having a diameter in excess of about 20  $\mu\text{m}$ , a nonwoven web comprising crimped fibers, or a nonwoven web having high bond-to-bond distances, the nonwoven web of the second and third layer comprises each individually comprises a coform nonwoven web, an airlaid nonwoven webs, or a hydroentangled nonwoven web.

16. (Original) The nonwoven web of claim 15, wherein the nonwoven web of the first layer has a mean equivalent pore radius between about 100  $\mu\text{m}$  and about 600  $\mu\text{m}$ , the nonwoven web of the second and third layers each comprise a coform nonwoven web having a equivalent pore radius between about 5  $\mu\text{m}$  and about 100  $\mu\text{m}$ .
17. (Original) A wipe comprising the nonwoven web laminate according to claim 1.
18. (Original) A wipe comprising the nonwoven web laminate according to claim 11.
19. (Original) A wipe comprising the nonwoven web laminate according to claim 13.
20. (Original) A wipe comprising the nonwoven web laminate according to claim 16.
21. (Original) A premoistened wipe comprising the nonwoven web laminate according to claim 1 and a fluid.
22. (Original) A premoistened wipe comprising the nonwoven web laminate according to claim 13 and a fluid.
23. (Original) A premoistened wipe comprising the nonwoven web laminate according to claim 16 and a fluid.